

ArceleorMittal South Africa Limited

Tubular Products
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MATERIAL TEST CERTIFICATE

EN10204: 2004 Type 3.1
Licensed under
API 5L
API 5CT
ISO9001:2015
PED2014/08/FU

Steelmaking Facility

ArceleorMittal South Africa Ltd
Mario Milani Road, Peacehaven
Vereeniging 1939
PO Box 48, Vereeniging 1930
South Africa

ArceleorMittal



Customer (A06): 40000229454
Order No (A08): 040062815845
Certificate Reference No (A03): 040062815845
Product (B01): FULLY KILLED HOT FINISHED CARBON STEEL SEAMLESS TUBES
Specification (B02): API 5L: 18 B/X42 PSL1 ISO3183:19 I245/I290 ASTM A106B/C/A53B/A530:18 ASME SA106B/C//SA530:17
Product Marking (B06): ARCELORMITTAL SA API Spec 5L-0319 MONOGRAM 09-22 ISO3183 I245/I290 PSL1 ASTM/ASME A/SA106B/C A/SA53B 5.563 0.625
20.014 B/X42 PSL1 SMLS CAST NO: 38B2508 PROD/ONO: T0642945410 TESTED 3000 psi 660.5 lbs NDE MADE IN RSA

Contract No./Customer Order (A07): S057 177688
Material No: 1000044553
Cast/Heat No (B07): 38B2508

General Information:

Quantity (B08)	Mass (B12)	Dimensions (B09-B11)		Total Length
		Tube OD	Thickness	
60(ea)	39.629.890(lb)	5.563 (")	0.625 (")	1,200.840(ft)
			Length	20.014(ft)

Steel making process (C70)	Final Rolling Operation (B04)
Electric Arc	As Rolled
	Final hot rolling finished above 1580°F and cooled in still air

Chemical Composition: (C71-C92) R22-(V+Ni+Ti)

Element(%)	R24-(Nb+V)																			
	C	Si	Mn	S	P	Cr	Ni	Mo	Cu	V	Al	Ti	Sn	Ca	N	B	Nb	CE	R22	R24
Minimum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum	0.200	0.200	1.30	0.030	0.030	0.40	0.40	0.150	0.400										0.43	
Heat	0.153	0.20	1.17	0.007	0.013	0.10	0.07	0.028	0.070	0.006	0.041	0.020	0.005	0.0018	0.0118	0.0003	0.0280	0.38		0.38
Product	0.16	0.22	1.18	0.008	0.011	0.10	0.06	0.026	0.070	0.004	0.043	0.019	0.005	0.0022	0.0091	0.0002	0.0240	0.39		0.47
Product (ADD)	0.14	0.22	1.20	0.009	0.013	0.10	0.07	0.027	0.070	0.004	0.042	0.020	0.006	0.0016	0.0096	0.0001	0.0260	0.38		0.50

Mechanical Properties:

Orientation and type of tensile test (C02): Longitudinal, Strip, 1 inch

Orientation of impact test piece (CA1):

Specification Limits	UTS (Rm) C12	Yield (0.2%) C1	%EL C13
Minimum	70 000 psi	42 100 psi	30.0
Maximum	-	-	-
(1) Actual	75 855	59 030	39.0
(2) Actual	77 450	60 191	41.0

Category	Results
Flattening (D51-D99)	PASSED
Hydrostatic (D02-D50)	20700 kPa (3000 psi) - 5 sec

Category	Results
NDI: EMI (D02-D50)	PASS - ASTM E570 - 12.5% NOTCH
NDI: UT (D02-D50)	UT not required
HV 22 lbs C31	161 164 164

Remarks (Z01):

Material in accordance with NACE MR0175-1/ISO15156-2:15, MR0103:15, Dimensions to ASME B36.10:15, End finish to ASME B16.25:17. Material guaranteed to conform to the yield strength requirements as per ASME, Sect II, Pt D, Table Y-1, 2021. Material conforms to the visual and dimensional requirements and is made to a suitable fine grain practice. Product is mercury free, and no weld repair was done. Residual magnetism <30Gs at time of measure. ArceleorMittal SA Tubular Products operates a QA System meeting the requirements of PED 2014/68/EU, Annex I, Par 4.3 and AD 2000-Merkblatt WO, certified by TÜV Rheinland Industrie Service GmbH. Certificate No. 01 202 ZA/Q-02 0004. Result values reported were converted from standard SI test results.

Quality Assurance Engineer, Certification: M Makgoba

Date of Release: 2022.09.20

Certified by:

M Makgoba

We hereby certify that the material was manufactured, tested and inspected to and fully comply with the requirements of referenced specifications. No changes, amendments or additions may be made to this document. Any changes which are effected shall invalidate this certificate.